

Job Description  
*Missouri State Highway Patrol*

Class Title: Criminalist I - Chemistry

Title Code: V00517

Effective Date: 04/24/96

Date Reviewed: 12/12/03

Date Revised: 01/05/05

**Immediate Supervisor:** Criminalist Supervisor

**Position Supervised:** None

**FLSA Classification:** Non-exempt

**Working Hours:** An employee in this position works an eight-hour shift as directed by the division director; however, working hours are subject to change at the discretion of the commanding authority.

POSITION SUMMARY

This is an entry-level position where the employee performs technical work in the scientific analysis of controlled substances, as well as alcohol content in liquor and body fluid samples (where applicable\*). An employee in this position participates in a formal and on-the-job training program. Work is performed under immediate supervision.

\*Employees assigned to satellite laboratories are also responsible for learning the daily operations of the satellite laboratory and for the scientific analysis of body fluids and liquor samples for alcohol content.

DESCRIPTION OF DUTIES PERFORMED

(Any one position may not include all of the duties listed nor do the listed examples include all tasks, which may be found in positions of this class.)

Under close supervision:

Participates in formal and on-the-job training in scientific analysis of controlled substances.

Participates in formal and on-the-job training in the scientific analysis of body fluid and liquor samples for alcohol content (where applicable\*).

Participates in, and successfully passes practical competency and/or written test(s) prior to assuming casework.

Learns about and participates in the proficiency testing program for the disciplines in the employee's area of competency.

Regularly processes, compares and examines submitted samples to determine the presence of controlled substances from crime scenes or parties involved in criminal activity.

Regularly accepts and analyzes body fluid samples for alcohol content submitted by law enforcement agencies from parties involved in criminal activity or death investigations (where applicable\*).

Regularly accepts and analyzes liquor samples submitted by the Division of Liquor Control of the Department of Public Safety or evidence (liquor) seized at crime scenes or during an

## Criminalist I - Chemistry

2

investigation to analyze and verify the alcoholic content (where applicable\*).

Interprets test results obtained from the proper microscopic, chemical, and instrumental methods.

Prepares evidence and exhibits; appears in court as an expert witness; maintains report files; issues periodic and special reports as assigned.

Confers with supervisor reference the appropriate test methodology based on the quantity and quality of the submitted sample.

Learns and performs proper instrument maintenance and repair procedures.

Learns and performs proper reagent and standard preparation and labeling.

Confers with supervisor to determine which items are most likely to associate or disassociate the victim or suspect with a crime scene.

Regularly works with a variety of potentially hazardous materials (e.g. HIV, hepatitis, and/or unknown pathogen contaminated body fluid evidence; unidentified chemicals on evidence).

Routinely testifies as an expert witness in a court of law while maintaining composure under intense cross-examination.

Observes other criminalists conducting crime scene investigations; participates in the investigations as needed upon approval of supervisor.

Learns to make decisions concerning the daily operation of the satellite laboratory; refers unusual and/or unique problems to supervisor or laboratory director (where applicable\*).

Learns and performs administrative duties associated with the general operation of the satellite laboratory as required (where applicable\*).

Studies standard operating procedures, training, quality control, and safety manuals, etc., within the chosen/related discipline.

Operates standard office equipment (i.e. personal computer, telephone, fax machine, copier, adding machine, etc.)

Performs job-related travel, as needed.

Performs other related duties as assigned.

### REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES

Ability to participate in a formal and on-the-job training program.

Ability to read and write, and speak proper English.

Ability to learn the procedures and methods used in the scientific analysis of submitted samples

Ability to learn and practice safety rules and procedures associated with laboratory equipment and chemicals.

## Criminalist I - Chemistry

3

Ability to learn about the preparation of evidence for presentation in court.

Ability to learn about the chain of custody for evidence.

Ability to perform work in accordance with prescribed procedures, makes accurate observations of test results, and prepare accurate records and reports.

Ability to gather, assemble, correlate and analyze facts to be incorporated into a report of laboratory work and tests.

Ability to compile and prepare information for formal presentation (e.g., mock trials held in the laboratory and actual court appearances).

Ability to maintain composure while under cross-examination in regard to personal and scientific qualifications and defend laboratory findings in court.

Ability to work with restricted, highly sensitive information in a confidential and professional manner.

Ability to prepare reagents and standards as prescribed in the appropriate procedure and quality manuals.

Ability to work with potentially hazardous materials as detailed in the description of duties.

Ability to work with microscopes for extended periods.

Ability to distinguish colors necessary to perform laboratory tests.

Ability to recognize and identify minute details.

Ability to establish and maintain effective working relations with others.

Ability to properly use or learn how to use laboratory equipment and chemicals.

Ability to stand for extended periods and lift moderate loads (30 pounds).

Ability to transport tools and equipment necessary to facilitate crime scene investigations.

Ability to work with materials that may be of a sexual nature relating to criminal activity (i.e. written material, photographs, and/or verbal language, etc.).

Ability to work hours as assigned.

### MINIMUM EXPERIENCE, EDUCATION, AND TRAINING REQUIRED

(The following represents the minimum qualifications used to accept applicants, provided that equivalent substitution will be permitted in case of deficiencies in either experience or education.)

Possess a baccalaureate degree in one of the natural sciences or closely related field. Coursework must include 20 semester hours of core chemistry coursework including two semesters of general chemistry, two semesters of organic chemistry, and one semester of organic chemistry laboratory. Organic chemistry laboratory that is integrated into a 4 or 5 hour organic chemistry course will satisfy the laboratory course requirement. A minimum acceptable grade of C or equivalent in these core chemistry courses and the core baccalaureate major

courses is required. Core courses with grades less than a C must be resolved by retaking the course and achieving a grade of C or equivalent. Prior job experience will not replace these minimum academic requirements.

NECESSARY SPECIAL REQUIREMENTS

Must be a resident of Missouri at the time of appointment.

Most possess a valid Missouri driver license at the time of appointment.

A minimum of two years of on-the-job training is required before advancement to the next level.

Possess or obtain a Missouri Department of Health Type I Permit (where applicable\*)